

3.16 WATERBORNE ACTIVITY

The Proposed Action and its alternatives could affect waterborne commercial and recreational activities along the Gulf Coast and Back Bay. Potentially affected waterborne activities include marine shipping, commercial fishing, and recreational boating and fishing. This section characterizes current navigational and commercial uses of coastal waters around Biloxi. Waterborne activities and navigation areas were summarized through a review of available literature, surveys, and existing regulations. The ROI for waterborne activity includes the three-county coastline, including the Mississippi Sound and Back Bay, but focuses on areas proposed for development under the Proposed Action and its alternatives. Sections 3.12 and 4.12 further discuss the related effects of the Proposed Action and its alternatives on recreational boating.

3.16.1 Navigation

The Mississippi Sound is relatively shallow, with an average depth of 9.9 feet at mean low water. Three formal north-south navigation channels cross the Mississippi Sound from the Gulf of Mexico to coastal Mississippi (Figure 3.16-1). The port of Pascagoula, which is approximately 28 miles east of the Broadwater site, provides deep-water access to the Intercoastal Waterway and Gulf of Mexico. It is accessed by a navigation channel with an authorized depth of 40 feet. The port of Gulfport, which is approximately nine miles east of the Broadwater site, is served by a navigation channel with a depth of 32 feet (Eleuterius, 1998a). The Biloxi Channel has an authorized depth of 12 feet and maintenance dredging stops seaward at the 12-foot isobath. The Intercoastal Waterway, extends the full east-west length of the Mississippi Sound. Other formal channels of lesser dimensions are the Broadwater Marina, Bayou Latre, Bayou Coden, and Bayou Caddy. Additionally, there is an informal east-west channel near the current Broadwater Marina. This channel is a long, narrow, borrow pit created and maintained by dredging associated with beach nourishment projects.

Recreational fishing and commercial shrimping are the primary uses of Mississippi coastal waters. A survey of recreational boating patterns indicates that there is little east-west navigation in the near-shore waters (Mississippi Bureau of Marine Resources, 1987). The most common destinations for boating trips originating in the Biloxi area, defined as the Long Beach to Ocean Springs area, are the offshore islands south of Gulfport. Only 13 percent of recreational boaters departing from the Biloxi activity zone traveled in the adjacent near-shore waters. The percentage of near-shore trips rose to 24 percent in the eastern Gautier-Pascagoula area, where part-time shrimping in near-shore waters is more common.

According to a 1987 survey of marina facilities in the three-county region, fishing and shrimping constituted 93 percent of all commercial boat activity in Harrison County (Mississippi Bureau of Marine Resources, 1987). Shrimping accounted for 71 percent of all activity. Fishing accounted for 22 percent of boating activity. Other minor boat use activities included oyster harvesting, charters, and tug service.

Broadwater Site

The shoreline adjacent to the existing Broadwater site is very flat and shallow. Recent profiles taken across the beach immediately next to the marina peninsula illustrate that the water depth reaches three to four feet approximately 1,000 feet off the seawall at US 90 and, with the exception of the informal east-west channel created by dredging, remains relatively constant seaward of that point. The current peninsula extends approximately 1,555 feet from the shoreline.

Alternative 3 Sites

Navigation near the Alternative 3 sites on the Back Bay consists of a combination of commercial, industrial, and recreational uses. Established navigation channels (Figure 3.16-1) carry most of the boat traffic. Existing uses at the six Alternative 3 sites are described in detail in Chapter 2.0 and Sections 3.8 and 4.8. Among the six sites, most have active commercial and/or recreational marine uses, including seafood processing, a marina, boat repair facilities, and industrial storage. Additionally, there is a variety of other marine-support uses in the area.

3.16.2 Commercial Fishing

The Mississippi seafood industry is a major component of the state's economy. The total value of the industry exceeds \$450 million annually. Over 5,000 people are employed in the harvesting, processing, and distribution of seafood products. An additional 10,000 people work in seafood-related support activities. Pascagoula/Moss Point and Gulfport are among the leading seafood ports in the nation. Mississippi seafood producers and processors participate in four major fisheries: shrimp, crabs, oysters, and finfish.

A total of 1,800 commercial fishermen engage in fisheries activities within the Mississippi Sound and Gulf of Mexico. Shrimp and finfish, primarily menhaden, are Mississippi's most valuable fishery resources. The city of Biloxi is the state's chief shrimp port. There are approximately 880 documented shrimping vessels in Mississippi employing over 1,500 individuals. While seafood landings in Mississippi are significant, the processing sector generates the bulk of economic activity. Much of the seafood processed in Mississippi is landed in the waters of other Gulf states.

The MDMR establishes regulations to protect and conserve marine resources. MDMR ordinances specify those waters in which finfish, shrimp, crabs, and other shellfish may be taken or harvested.

Broadwater Site

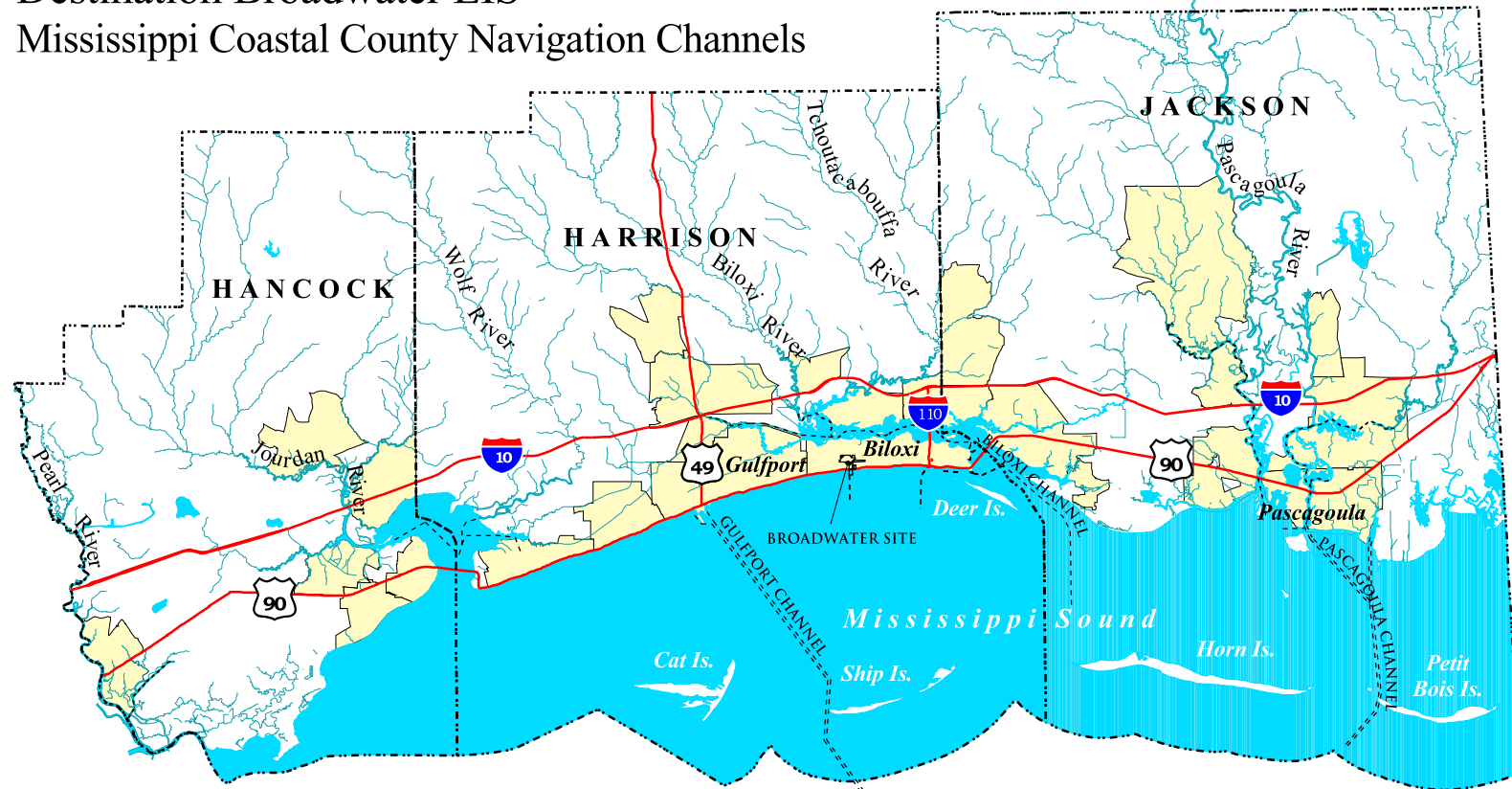
Permitted zones for menhaden fishing, shrimping, trammel netting, gill netting, and oyster harvest lie off-shore to the south of the Broadwater site and extend to the east and west across the Mississippi Sound from Pascagoula to Gulfport. There is currently no oyster harvesting activity in the vicinity of the Broadwater site (personal communication, C. Perret, MDMR, Biloxi, MS to

1 E. Drake, EDAW, Atlanta, GA, December 22, 1999). Though the specific boundaries of each
2 zone vary, commercial fishing is generally prohibited within a narrow band along the coast.
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





4 *Alternative 3 Sites*
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6 There are no permitted commercial fishing zones in the Back Bay area (personal communication,
7 J. Jewell, MDMR, Biloxi, MS to E. Drake, EDAW, Atlanta, GA, November 23, 1999). Fishing
8 activity in the Back Bay is limited to recreational hook-and-line fishing.
9

Destination Broadwater EIS Mississippi Coastal County Navigation Channels



Legend:

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|---|--|
|  Navigation Channels |  County Boundaries |
|  Perennial Streams |  Major Water Bodies |
|  Major Roads |  Census Places |

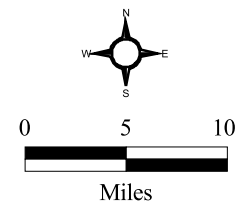


Figure 3.16-1: Navigation channels in the Mississippi coastal county area